

# KA-1000-THX

## SUBWOOFER AMPLIFIER

## OWNER'S MANUAL



# KA-1000-THX AMPLIFIER

## IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

**WARNING:** To reduce the risk of fire or electrical shock, do not expose this apparatus to rain or moisture.



**WARNING:** Voltages in this equipment are hazardous to life. No user-serviceable parts inside. Refer all servicing to qualified service personnel.

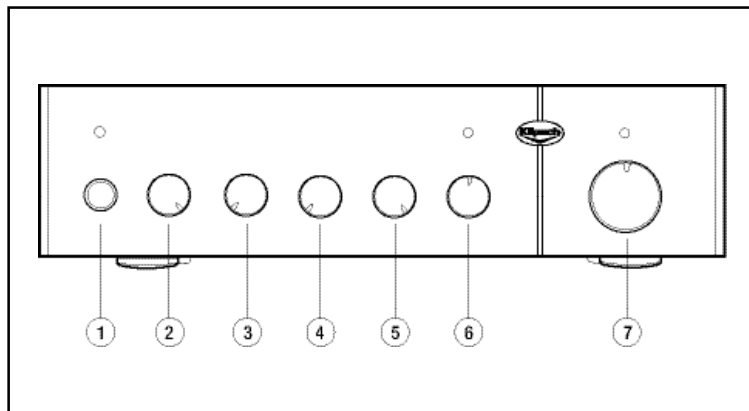
**CAUTION:** Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

## ABOUT YOUR KLIPSCH PURCHASE

Thank you for your purchase of a Klipsch subwoofer amplifier. After reading this manual and connecting your system, you will hear the results of over 55 years of stringent engineering and class-leading research and development. Please be sure to fill out the warranty card at the back of this manual or online at [www.klipsch.com](http://www.klipsch.com) so we are better able to serve you. Again, thank you for choosing Klipsch and we hope that your subwoofer amplifier brings life to your music and movies for many years.

## UNPACKING

The easiest way to remove the amplifier from its carton is to turn the open end of the box down so that it is resting on a table or the floor, with the flaps spread out and away. Then pull the box straight up and off. Remove any packing material from the amplifier, place it back in the carton, and store in case you ever need to ship the amplifier.



## FRONT PANEL CONTROLS

### 1. Master Power On/Off

The Master Power switch turns the amplifier on and off. In addition to the Master Power switch, the KA-1000-THX has an Auto Power function that will allow the amplifier to turn itself on and off automatically when an audio signal is detected. An LED indicates the current status of the amplifier – RED when the amplifier is in Standby and GREEN when the amplifier is active. The LED is off when the Master Power switch is set to the "Off" position.

### 2. Auto Power On/Off

The Auto Power switch has two settings – "On" and "Off". In the "Off" position, the Master Power switch turns the amplifier on or off. If you leave the Master Power switch in the "On" position and set the Auto Power switch to the "On" position, then the amplifier will automatically turn itself on and off when an audio signal is detected. There is a 2 second On delay and a 15 minute Off delay when using the Auto Power function.

### 3. Phase Control

The Phase control on the KA-1000-THX is continuously variable from 0 to 180 degrees. This control allows you to fine tune the performance of your subwoofer system by optimizing the blend with the main speakers. Basically, one of the positions will result in an audible increase in bass output depending upon room placement.

### 4. Boundary Gain Compensation On/Off

The Boundary Gain Compensation switch allows you to fine-tune the low-end extension of your subwoofer system based upon room placement. In some room locations, your subwoofers low-end response may become exaggerated or boomy due to the increase in output from your room's acoustics. In this case, selecting the "On" position will restore the system to a flatter, less boomy response. If you are using a THX® Ultra2™ receiver or processor and you have selected "Ultra2" for the sub setting, the boundary gain compensation switch should be set to "Off."

### 5. THX On/Off

The THX switch provides a means to bypass the crossover and level controls when using a THX preamplifier or receiver. In the "On" position, the crossover and level controls do not function. (In this configuration, your preamplifier or receiver will perform those functions.) In the "Off" position, the crossover and level controls operate normally. Be sure the volume level on your preamplifier or receiver is turned down before changing the setting of this switch.

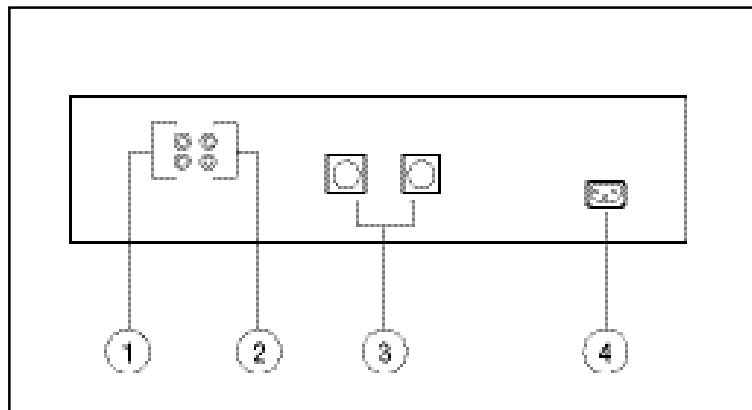
### 6. Lowpass Crossover

The Lowpass Crossover control allows you to select the proper frequency at which your subwoofer system blends with your main speakers. It is selectable from 40-120Hz. You should set this control to the approximate low-frequency limit of your main left and right speakers. In a THX system, this setting would be 80Hz. If the THX control is set to the "On" position, this control will not operate. An LED status indicator is provided to tell you whether or not this control is operational – GREEN for active and RED for bypassed.

### 7. Level Control

The Level control is the volume setting for the amplifier. It is used in conjunction with the subwoofer output level control on your preamplifier or receiver. It is used to adjust the overall output level of your subwoofer system. If the THX control is set to the "On" position, this control will not operate. An LED status indicator is provided to tell you whether or not this control is operational – GREEN for active and RED for bypassed.

# KA-1000-THX AMPLIFIER



## REAR PANEL INPUTS AND OUTPUTS / CONNECTIONS AND SETUP

**Make all connections with the power turned "OFF" on both the subwoofer amplifier and your receiver or preamplifier!**

### 1. Line Level Input

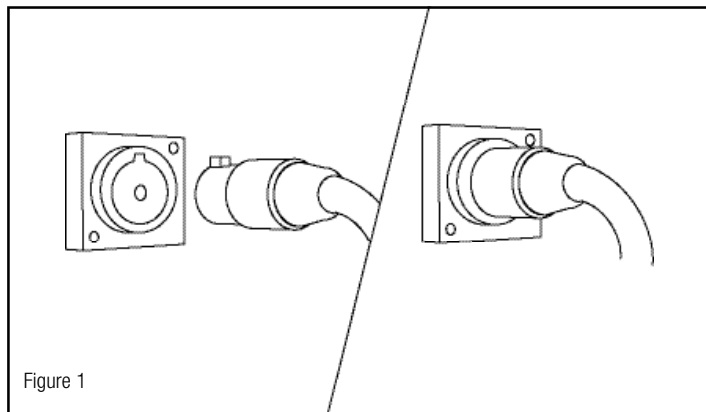
The Line Level input consists of a pair of gold-plated RCA phono jacks. Either one or both may be used. (Use a shielded, high quality subwoofer interconnect cable of appropriate length with RCA plugs on each end. Your dealer can help you select a suitable cable.) This input can function as either a Line Level input or an LFE Input, depending on the position of the THX On/Off switch. When THX is On, the Lowpass Crossover is bypassed and the Line Level input effectively functions as an unfiltered LFE input.

### 2. Line Level Output

The Line Level output consists of a pair of gold-plated RCA phono jacks. Either one or both may be used. This output is an unfiltered passthru of the Line Level input signal. It can be used to connect to a second KA-1000-THX amplifier or to connect back to your electronics if needed.

### 3. Speaker Level Outputs

The Speaker Level outputs are two professional style Speakon® NL2 connections. This is a simple connection that is easy to use, secure and foolproof. You simply align the tab on the connector with the slot on the output jack, fully insert the connector, turn it clockwise and the collar locks into place. (Figure 1) To remove it, pull back on the collar and while holding it back, turn it counter clockwise and pull it out. This connection is repeated on the back of the subwoofer enclosure. If you are using two KW-120-THX subwoofers, connect the second one in the same fashion to the KA-1000-THX's second output jack. (A single, 20-foot length, Monster Cable THX Ultra certified subwoofer speaker cable is provided with each KW-120-THX subwoofer enclosure. Contact your dealer if you need a longer cable.)



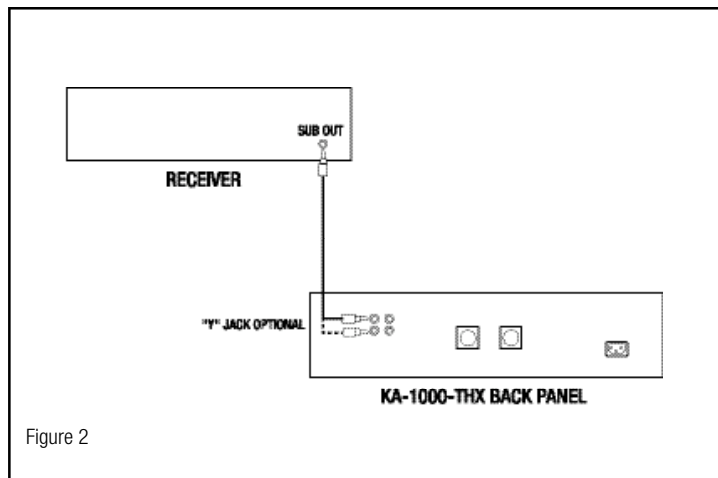
### 4. AC Line Cord

The AC Line connection uses a detachable three-prong power cord. Insert the line cord into this jack, set the Master Power switch to "Off", then insert the power cord into an appropriate AC receptacle. Leave the Master Power switch off until all connections are completed. (We recommend leaving the Master Power and Auto Power switches in the "On" position for normal operation in most systems.)

## CONNECTION AND ADJUSTMENT

The KA-1000-THX is a high-performance, THX Ultra2-certified Class D digital power amplifier with a built-in subwoofer crossover. It is designed specifically to drive one or two KW-120-THX subwoofers to maximum output without audible distortion or risk of damage. Although the amplifier's connections and controls are simple, their use varies somewhat according to the subwoofer system's application. Typical setup procedures are described in the following sections – one for digital systems and one for analog systems.

**THX / Digital Surround Receiver or Processor Connection** — Today's Dolby Digital® and DTS® digital surround receivers and processors, as well as all THX-certified models, have line-level subwoofer outputs and built-in subwoofer crossovers. If your system is built around one of these, it will almost always be best to use the KA-1000-THX with the THX switch in the "On" position. This will bypass the crossover and level controls. Connect the subwoofer output on the receiver or processor to one or both of the KA-1000-THX's two input jacks (Figure 2). Use a shielded, high quality subwoofer interconnect cable of appropriate length with RCA plugs on each end. Your dealer can help you select a suitable cable. Be sure to go into your receiver or processor's speaker setup menu and set Subwoofer to "On" or "Yes", or if it is a THX Ultra2 certified model, select "Ultra2" in the subwoofer menu. Your receiver or processor may have additional bass management abilities beyond simply activating the subwoofer output. Consult your receiver or processor's owner's manual or your dealer for more information on the proper bass management settings for your system.



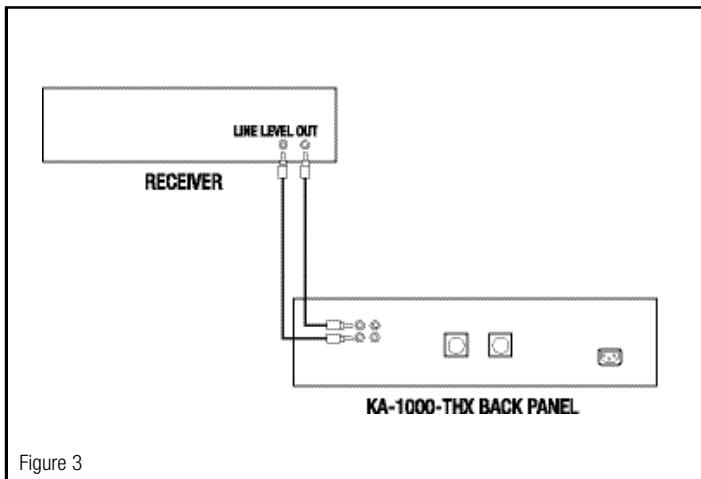
**Crossover Adjustment** – With the THX switch in the "On" position as suggested for this type of setup, the crossover control will not function. Its status LED will be red signifying that this control is bypassed. Your receiver or processor will perform the crossover functions for the subwoofer in this situation. When using either the KL-650-THX or KL-525-THX as your front speakers, select the 80Hz (THX) crossover frequency.

**Level Control** – With the THX switch in the "On" position as suggested for this type of setup, the level control will not function. Its status LED will be red signifying that this control is bypassed. Your receiver or processor will perform the volume level functions for the subwoofer in this situation.

**Phase Control** – In some installations the setting of the Phase control may not make much difference, whereas in others it may be necessary to go back and forth between the Phase and Level controls for a while in order to get the very best blend with the main speakers. Since each control setting (including the one for crossover frequency in the receiver or processor) affects the optimum settings for the others, it often takes a while to get everything dialed in just right. Start with the Phase control at 0° and play a recording with a prominent, repeating bass line in your listening position. Repeat this process with the control in the 90° and 180° positions. Use the setting that yields the greatest bass output.

### Non-THX / Analog Surround Receiver / Processor or Two-Channel Stereo System

**Connection** – Some analog A/V receivers and processors (without Dolby Digital® or DTS® capability) have a line-level subwoofer output. Others have left- and right-channel line-level outputs, as do some stereo receivers and integrated amplifiers. All separate stereo preamps and surround processors have line-level outputs. If your system is built around one of these, it will almost always be best to use the KA-1000-THX with the THX switch in the “Off” position. This will activate the crossover and level controls. These types of outputs should be connected to the KA-1000-THX’s line-level inputs. (See Figure 3.) You will need one or two shielded, high quality interconnect cables of appropriate length with RCA plugs on each end. Your dealer can help you select suitable cables.



- **Subwoofer Output** – Connect the subwoofer output jack to one of the line-level input jacks on the KA-1000-THX.
- **Preamp Outputs on Receiver or Integrated Amplifier** – If your receiver or integrated amplifier has spare preamplifier outputs for its front left and right channels, connect these to the line-level inputs on the KA-1000-THX.
- **Pre-out/Main-in Loops on Receiver or Integrated Amplifier** – Some receivers and integrated amplifiers have their preamplifier and power amplifier stages connected externally via jumpers. If yours has its left and right front channels connected this way, you can connect the KA-1000-THX to those preamp outputs. You will need a pair of Y-adaptors, each with two male RCA plugs and one female RCA jack. Remove the jumpers for the two channels. For each, plug one leg of a Y-adaptor into the preamp output jack and another into the main amp input jack. Plug the cables leading to the KA-1000-THX into the female ends of the Y-adaptors.
- **Separate Preamplifier or Surround Processor** – You will need a pair of Y-adaptors, each with one male RCA plug and two female RCA jacks. Unplug the cables leading from the front left- and right-channel outputs on the preamp or processor and plug the Y-adaptors into them. For each channel, plug the cable leading to the power amplifier into one of the RCA jacks on the Y-adaptor and the cable leading to the KA-1000-THX into the other.
- **Crossover Adjustment** – With the THX switch in the “Off” position as suggested for this type of setup, the crossover control will be activated. Its status LED will be green signifying that this control is active. Set the control to the approximate low-frequency limit of your main left and right front speakers. If you don’t have their specifications, take an educated guess based on the size of the speakers. A large speaker will usually work down to lower frequencies than a small speaker. So for a large floorstanding loudspeaker, you might start with the Crossover frequency set all the way down to 40Hz, whereas for very small satellite speakers you might want to turn it all the way up to 120Hz. Typical bookshelf speakers would tend to be in the 50Hz to 80Hz range. If the crossover frequency is set higher than 100Hz, the subwoofer should be in the front of the room near the front main speakers.
- **Level Control** – With the THX switch in the “Off” position as suggested for this type of setup, the level control will be activated. Its status LED will be green signifying that this control is active. Play a variety of music recordings containing strong but not overpowering bass. Adjust the KA-1000-THX’s level control until the music sounds consistently warm and natural. If you have trouble getting enough low bass without the sound becoming boomy, it probably means the Crossover control is set too high. Try turning it down a bit at a time until the problem goes away. If the sound is thin until you turn the subwoofer Level up so much that lower bass is too prominent, start by varying the setting of the Phase or Boundary Gain Compensation controls. If that does not entirely solve the problem, you probably need to raise the Crossover frequency.

- **Phase Control** – In some installations the setting of the Phase control may not make much difference, whereas in others it may be necessary to go back and forth between the Phase and Level controls for a while in order to get the very best blend with the main speakers. Since each control setting (including the one for crossover frequency in the receiver or processor) affects the optimum settings for the others, it often takes a while to get everything dialed in just right. Start with the Phase control at 0° and play a recording with a prominent, repeating bass line in your listening position. Repeat this process with the control in the 90° and 180° positions. Use the setting that yields the greatest bass output.

**General Comments About Adjustments:** Since any change in the setting of one control tends to change the optimum settings for the others to some degree, the adjustment process is very interactive and involves a great deal of trial and error. If after a period of listening and calibration you are still not happy, it may mean that you need to experiment a little with the location of the subwoofer. That, of course, also interacts with everything else. Again, patience is a virtue. The end result will be well worth the effort.

### CARE AND CLEANING

The only thing you should ever need to do to your subwoofer amplifier is to dust it occasionally. Never apply any abrasive or solvent-based cleaner or any harsh detergent.

### WARRANTY — U.S. AND CANADA ONLY

The Warranty below is valid only for sales to consumers in the United States or Canada. KLIPSCH, L.L.C. (“KLIPSCH”) warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below) for a period of five (5) years from the date of purchase. During the Warranty period, KLIPSCH will repair or replace (at KLIPSCH’s option) this product or any defective parts (excluding electronics and amplifiers). For products that have electronics or amplifiers, the Warranty on those parts is for a period of two (2) years from the date of purchase.

To obtain Warranty service, please contact the KLIPSCH authorized dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your KLIPSCH product, it can be returned, freight paid, to KLIPSCH for repair. Please call KLIPSCH at 1-800-KLIPSCH for instructions. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the Warranty period, must be presented or included to obtain Warranty service.

This Warranty is invalid if (a) the factory - applied serial number has been altered or removed from this product or (b) this product was not purchased from a KLIPSCH authorized dealer. You may call 1-800-KLIPSCH to confirm that you have an unaltered serial number and/or you purchased from a KLIPSCH authorized dealer.

This Warranty is only valid for the original purchaser and will automatically terminate prior to expiration if this product is sold or otherwise transferred to another party.

This Warranty does not cover cosmetic damage or damage due to misuse, abuse, negligence, acts of God, accident, commercial use or modification of, or to any part of, the product. This Warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than KLIPSCH or a KLIPSCH dealer which is authorized to do KLIPSCH warranty work. Any unauthorized repairs will void this Warranty. This Warranty does not cover product sold AS IS or WITH ALL FAULTS.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. KLIPSCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

Some states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights, which vary from state to state.

## WARRANTY OUTSIDE THE UNITED STATES AND CANADA

The Warranty on this product if it is sold to a consumer outside of the United States or Canada shall comply with applicable law and shall be the sole responsibility of the distributor that supplied this product. To obtain any applicable warranty service, please contact the dealer from which you purchased this product, or the distributor that supplied this product.

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Cut along dotted line and mail.

For multiple speaker purchases, please fill out only one warranty card.

Name: \_\_\_\_\_

Street Address: \_\_\_\_\_

City/State/Zip: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Work Phone: \_\_\_\_\_

E-mail Address: \_\_\_\_\_

Would you like to receive the latest product updates and news via e-mail? ☐ Yes ☐ No

Product Purchase

Model and serial number must be included to honor your warranty card. For multiple speaker purchases, please fill out only one warranty card.

Model	Serial Number
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Model	Serial Number
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Model	Serial Number
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Model	Serial Number
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Model	Serial Number
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Model	Serial Number
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What store did you purchase your Klipsch products from?

Store Name: \_\_\_\_\_

State: \_\_\_\_\_

How did you hear about Klipsch? ☐ Audio/Home Theater Magazine ☐ Other Magazine ☐ TV ☐ Radio ☐ Newspaper  
☐ Trade Show ☐ Friend ☐ Retail Dealer ☐ Direct Mail ☐ Website ☐ Web Forum

Have you purchased Klipsch products before? ☐ Yes ☐ No

If yes, what products?

Product Name(s): \_\_\_\_\_

When do you hope to purchase additional loudspeakers? ☐ 6 mos. – 1 yr. ☐ 1–2 yrs.

How likely are you to consider Klipsch products for your upcoming purchases? ☐ Very likely ☐ Somewhat likely  
☐ Doubtful

If doubtful, why? ☐ Don't carry product I'm looking for ☐ Too expensive ☐ Klipsch dealer too far away ☐ Other

Please tell us about you!

☐ Married ☐ Single ☐ Student ☐ Male ☐ Female

Age: ☐ 15-17 ☐ 18-24 ☐ 25-35 ☐ 36-45 ☐ 46-55 ☐ 55-64 ☐ 65+

Annual Household Income: ☐ Under \$25,000 ☐ \$25-35,000 ☐ \$35-50,000 ☐ \$75-100,000 ☐ \$100,000+





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Indianapolis, Indiana 46268  
1·800·KLIPSCH • [www.klipsch.com](http://www.klipsch.com)

Klipsch Audio Technologies  
3502 Woodview Trace, Suite 200  
Indianapolis, IN 46268

Make sure you return your warranty card so that we may keep you up-to-date on new Klipsch products and promotions. As always, if you have any questions, contact your local authorized Klipsch dealer.

For your records:

Model

Serial Number

Date Purchased

Dealer Name

Place  
FIRST CLASS  
Postage  
Stamp Here